In the Matter of:

State of Oklahoma Tyson Foods Inc. et al.

Case no. 05-CV-329-GFK-PJC

Expert Report

January 29, 2009

Prepared for:

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Summary of Opinions

- 1. I obtained the State database for the Illinois River watershed (IRW) and evaluated the surface water and sediment data upstream and downstream of the Cargill locations. The purpose of this evaluation did not include determining the definitive causes of elevated phosphorus levels in the IRW, if any. Rather, the purpose was to determine whether State data show if specific Cargill locations were responsible for any elevated phosphorus levels in Lake Tenkiller and/or the IRW.
- The data provided to me do not demonstrate that individual Cargill contract-grower or Cargill-owned (collectively, Cargill) locations have affected adjacent receiving waters.
- 3. There have been no site-by-site sampling campaigns and no loading computations to demonstrate that individual Cargill locations have affected surface waters.
- 4. Based on my analysis, I distinguished five classes of Cargill locations:
 - 6 sites where there is no demonstrable effect on potentially receiving waters because there is a substantial distance (at least four miles) between the site and the nearest environmental data, and thus there are no relevant sample data available: OK-01, AR-09, AR-10, AR-11, AR-20, and AR-25;
 - 9 sites where there appears to be no downgradient effect based on the relevant surface water sample data and/or sediment phosphorous (P) baseline data: OK-05, OK-06, AR-07, AR-18, AR-21, AR-23, AR-26, AR-32, and AR-33;
 - 3 sites where P concentrations in the relevant surface water and/or sediment sample data decrease from upstream to downstream of the site, showing no effect on the potentially receiving water: OK-03, AR-34, and AR-35;
 - 17 sites where P concentrations in the relevant samples are above baseline for sediment samples or elevated above screening level for surface water samples; the sample data reflect natural processes and/or anthropogenic activities contributing P between the Cargill location and the relevant sample location: OK-02, OK-04, AR-08, AR-12, AR-13, AR-14, AR-15, AR-16, AR-17, AR-19, AR-22, AR-24, AR-27, AR-28, AR-29, AR-30, and AR-31; and
 - 0 sites where P concentrations appear affected by Cargill locations.